#### DEPARTMENT OF THE NAVY



# COMMANDING OFFICER TRARON EIGHT SIX 390 SAN CARLOS RD SUITE G PENSACOLA FLORIDA 32508-5503

IN REPLY REFER TO

TRARONEIGHTSIXINST 13720.1M N2 2 6 JUN 2015

## TRAINING SQUADRON EIGHT SIX INSTRUCTION 13720.1M

From: Commanding Officer, Training Squadron EIGHT SIX

Subj: PREVENTION OF FOREIGN OBJECT DAMAGE (FOD)

Ref: (a) COMNAVAIRFORINST 4790.2B

(b) CNATRAINST 13700.2N

(c) COMTRAWINGSIXINST 13700.1P

(d) TRARONEIGHTSIXINST 3710.1AC

Encl: (1) FOD walk diagram

- 1. <u>Purpose</u>. To promulgate procedures in accordance with references (a) through (d) for an effective Foreign Object Damage (FOD) Prevention Program.
- 2. Cancellation. TRARONEIGHTSIXINST 13720.1L
- 3. <u>Application</u>. This instruction applies to all personnel working on or near gas turbine engines.

### 4. Discussion

- a. FOD remains a continuing problem which accounts for the largest percentage of premature engine removals in the Navy. Each of these removals results in needless expenditure of maintenance man-hours and money. Training capability and operational readiness are also reduced.
- b. Various and sometimes surprising objects have been drawn into the inlet ducts of jet aircraft by incoming air. Generally, foreign objects may be separated into three categories:
- (1) Metal Includes aircraft and engine fasteners (nuts, bolts, rivets, washers, safety wire, etc.), mechanics' tools (screwdrivers, wrenches, pliers, etc.) and metals (safety pins, wires, etc.)
- (2) Stone Natural (pebbles, gravel, sand, etc.), and manmade (concrete, cinders, etc.)

- (3) Miscellaneous Ice, organic matter (birds, wood, paper, etc.) and personal articles (hats, pencils, combs, rags, etc.)
- c. Primary causes of FOD are poor housekeeping, unprofessional maintenance procedures, and the lack of continuing FOD control training.
  - d. Areas prone to ingesting of FOD are:
    - (1) Hot refueling areas
    - (2) Aircraft turn-up area awaiting takeoff
    - (3) First 1,500 feet of any runway
    - (4) Taxiways
    - (5) Ramp parking areas
    - (6) Areas in vicinity of Helo OPS
- e. The prevention of FOD to engines is the responsibility of every individual attached to VT-86. The human element is our greatest FOD control asset when personnel are properly trained and supervised. All squadron personnel <u>must</u> conscientiously adhere to this instruction and exercise effective techniques to eliminate FOD.
- 5. <u>Action</u>. All hands comply with references (a) through (d). In addition, the following responsibilities are assigned:
  - a. Safety Officer shall:
    - (1) Oversee the FOD program.
    - (2) Make periodic inspections of squadron areas.
  - b. The Squadron FOD Control Officer shall:
- (1) Ensure known or suspected FOD incidents are reported by pilots/mission commanders to TW-6 Safety.
- (2) Ensure all aircrew receive FOD indoctrination training.

- (3) Represent the squadron at periodic FOD council meetings.
  - c. Pilots/Mission Commanders shall:
- (1) Avoid taxiing into another aircraft's exhaust blast or into the propeller wash of reciprocating aircraft.
- (2) Comply with taxi intervals as assigned in reference (d).
- (3) Promptly report taxiway, runway, or ramp areas surface deterioration and any other FOD hazard.
- (4) Remove "Foreign Objects" from the cockpit when departing the aircraft.
- (5) Avoid taxiing/turning directly in front of another aircraft, thus decreasing the possibility of FOD due to jet blast.
- (6) Report any known or suspected incidents to TW-6 Safety personnel and the VT-86 Safety Department.

#### d. All aircrew shall:

- (1) Inventory personal items (pencils, kneeboard clips, keys, etc.) before and after each flight.
- (2) Report any missing items or suspected missing items after flight immediately to Maintenance Control.
- (3) Carry only mission essential items on their person during flight.
  - (4) Inspect intakes prior to and after each flight.
- (5) Perform FOD Walkdown in the immediate vicinity of the aircraft prior to man up.
- (6) Pay particular attention to FOD conditions at non-military airfields with respect to taxi and start-up on cross-country or in/out flights.

- (7) Report any contract maintenance FOD related discrepancies (tools, bolts, rivets, rags or any unprofessional maintenance procedures) to VT-86 Safety.
- (8) To the max extent possible, attend regularly scheduled squadron FOD walkdown, typically Monday morning per the flight schedule per enclosure (1).
- (9) At no time will any gear be placed on any external aircraft surface.
- e. Contract maintenance personnel perform daily morning FOD walkdowns without VT-86 participation. These contractor FOD walkdowns do not relieve VT-86 aircrews from being vigilant for FOD in the hangar spaces or on the flight line. FOD prevention is an all hands evolution that requires constant attention.
- 6. <u>Recommendations</u>. Recommendations for improvements or changes to the FOD Prevention Program shall be forwarded to the Commanding Officer via the VT-86 FOD Control Officer.

W. P. DONNELLY

Distribution:

Electronic only, via VT-86 Website

https://www.cnatra.navy.mil/tw6/vt86/Instructions.asp